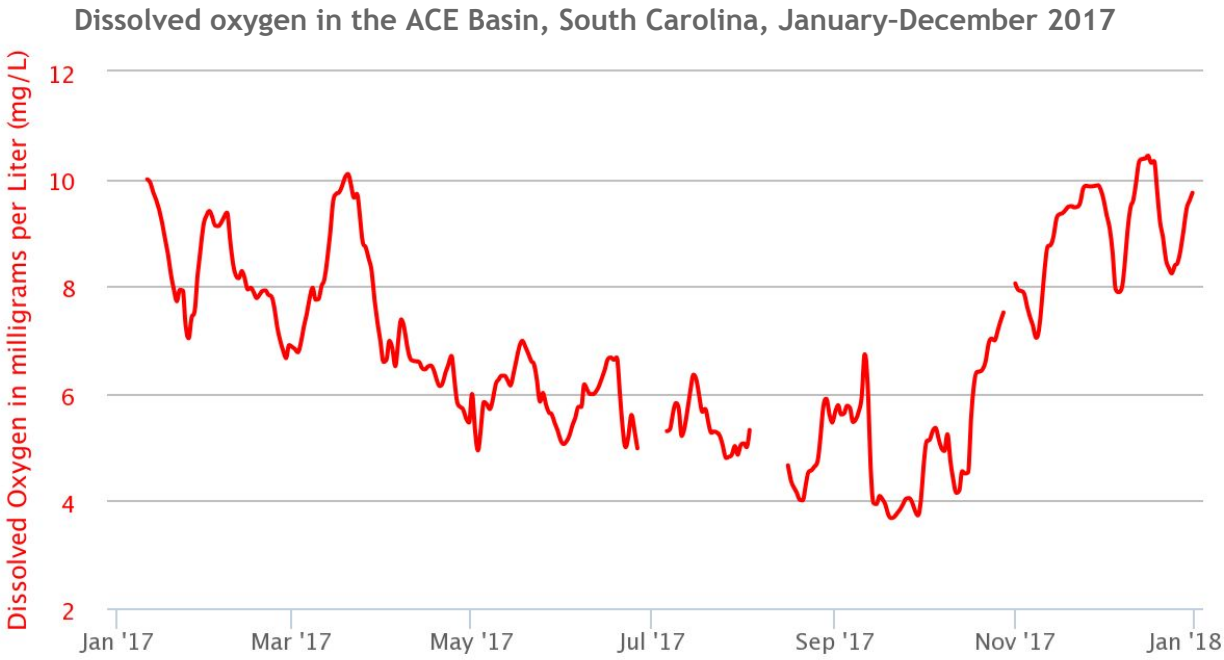
STUDENT WORKSHEET - LEVEL 2

ANALYZING DISSOLVED OXYGEN IN ESTUARIES



Part 1: Instructions: Use the graph above to answer the following questions:

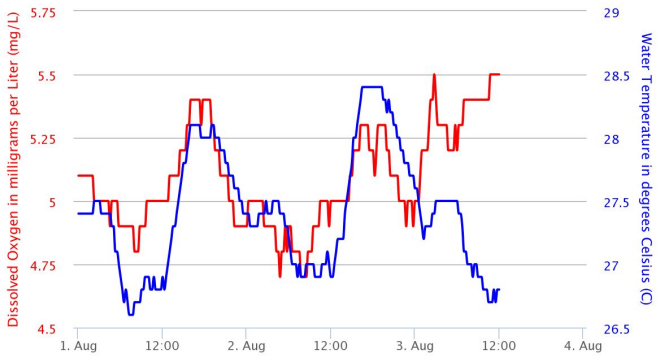
1. Approximately, how much dissolved oxygen was in the water at ACE Basin on January 17, 2017?
    A. 6 mg/L
    B. 8 mg/L
    C. 10 mg/L
    D. 12 mg/L

2. Dissolved oxygen concentrations were lowest during which month?
    A. January
    B. July
    C. August
    D. September

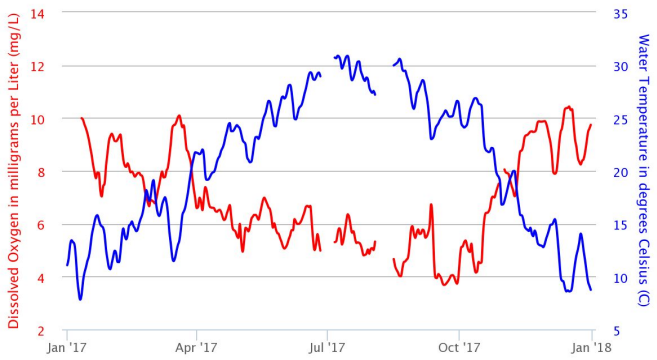
3. A fish that lives in the ACE Basin year round would have to be well-adapted to dissolved oxygen concentrations ranging from approximately _____mg/L to _____ mg/L.

Comparing Daily and Seasonal Relationships:
Water Temperature and Dissolved Oxygen in the ACE Basin, South Carolina

August 01-03, 2017



January - December 2017



Part II: Instructions: Use the graph above to answer the following questions:

1. The first graph shows fluctuations of water temperature and dissolved oxygen over a 2-day period, August 1 - 3, 2017.
   A) On each day, what time of day was water temperature highest?
   B) What time of day was dissolved oxygen highest?

2. A) Describe the relationship between water temperature and dissolved oxygen in the first graph.
   B) Is this what you expected? Why or why not?
   C) Propose an explanation for the daily fluctuations in dissolved oxygen at ACE Basin on August 1-3, 2017.

3. A) Describe the relationship between water temperature and dissolved oxygen in the second graph.
   B) What might explain the apparent difference in the relationship of water temperature and dissolved oxygen in the two graphs?